

# Claims

[c1] We claim as our invention:

1. A golf club head comprising:

a face component composed of a metal material, the face component having striking plate portion and a re-turn portion, the striking plate portion having a thickness in the range of 0.010 inch to 0.250 inch and the re-turn portion having a thickness ranging from 0.010 inch to 0.250 inch, the return portion extending a distance ranging 0.25 inch to 1.5 inches from a perimeter of the striking plate portion; and

an aft-body composed of a metal material selected from the group consisting of magnesium alloys, aluminum alloys, magnesium and aluminum, the aft-body having a crown portion, a sole portion and a ribbon portion, the aft-body attached to the return portion of the face component, the aft-body having at least one weight cavity for mass placement;

wherein the golf club head has a coefficient of restitution of 0.80 to 0.94.

[c2] 2. The golf club head according to claim 1 wherein the striking plate portion has a thickness in the range of

0.055 inch to 0.125 inch.

- [c3] 3. The golf club head according to claim 1 wherein the striking plate has a variable face thickness.
- [c4] 4. The golf club head according to claim 1 further comprising at least one weighting member disposed within the at least one weight cavity, the weighting member having a mass ranging from 2 grams to 20 grams.
- [c5] 5. The golf club head according to claim 1 further comprising a skid plate covering the at least one weight cavity.
- [c6] 6. The golf club head according to claim 1 wherein the aft-body is composed of a magnesium alloy.
- [c7] 7. The golf club head according to claim 1 wherein the striking plate portion has an aspect ratio no greater than 1.7.
- [c8] 8. The golf club head according to claim 1 wherein the aft-body is composed of an injection molded metal material.
- [c9] 9. The golf club head according to claim 1 wherein the golf club head has a volume ranging from 290 cubic centimeters to 600 cubic centimeters.

- [c10] 10. The golf club head according to claim 1 wherein the moment of inertia about the Izz axis of the golf club head is greater than 3000 grams–centimeter squared.
- [c11] 11. The golf club head according to claim 1 wherein the face component is composed of a metal material selected from the group consisting of titanium alloy, amorphous metal, stainless steel and maraging steel.
- [c12] 12. A golf club head comprising:  
a face component composed of a metal material, the face component having a striking plate portion and a return portion, the striking plate portion having a thickness in the range of 0.010 inch to 0.250 inch and the return portion having a thickness ranging from 0.010 inch to 0.250 inch, the return portion extending a distance ranging 0.25 inch to 1.5 inches; and  
an aft–body comprising an upper section and a lower section, the upper section comprising a crown portion and an upper ribbon portion, the lower section comprising a sole portion and a lower ribbon portion, the aft–body composed of a metal material selected from the group consisting of magnesium alloys, aluminum alloys, magnesium and aluminum, the aft–body attached to the return portion of the face component, the aft–body having a thickness ranging from 0.015 inch to 0.100 inch;  
wherein the moment of inertia about the Izz axis

through the center of gravity is greater than 3000 grams–centimeter squared, and the moment of inertia about the Iyy axis through the center of gravity is greater than 1900 grams–centimeter squared.

[c13] 13. The golf club head according to claim 12 wherein the face component is composed of a metal material selected from the group consisting of titanium alloy, amorphous metal, stainless steel and maraging steel.

[c14] 14. A golf club head comprising:  
a face component composed of a metal material, the face component having a striking plate portion and a return portion, the striking plate portion having a thickness in the range of 0.010 inch to 0.250 inch, the return portion extending a distance ranging 0.25 inch to 1.5 inches from a perimeter of the striking plate portion; and  
an aft-body comprising an upper section and a lower section, the upper section comprising a crown portion and an upper ribbon portion, the lower section comprising a sole portion and a lower ribbon portion, the aft-body composed of a metal material selected from the group consisting of magnesium alloys, aluminum alloys, magnesium and aluminum, the aft-body attached to the return portion of the face component, the aft-body having a thickness ranging from 0.015 inch to 0.100 inch; wherein the golf club head has a volume ranging from

350 cubic centimeters to 525 cubic centimeters and a mass ranging from 175 grams to 225 grams.

[c15] 15. The golf club head according to claim 14 wherein the face component is composed of a metal material selected from the group consisting of titanium alloy, amorphous metal, stainless steel and maraging steel.

[c16] 16. A golf club head comprising:  
a face component composed of a titanium alloy material and comprising a return portion and a striking plate portion, the striking plate portion having concentric regions of varying thickness with the thickest region about the center of the striking plate portion; and  
an aft-body comprising an upper section and a lower section, the upper section comprising a crown portion, an upper ribbon portion and an inward recessed section, the lower section comprising a sole portion, a lower ribbon portion and an inward recessed section, the aft-body composed of an injection molded magnesium alloy material, the aft-body having a thickness ranging from 0.010 inch to 0.100 inch, the return portion overlapping the inward recessed portion and attached to the inward recessed portion, the ribbon portion having a heel weighting cavity, a rear weighting cavity and a toe weighting cavity.

[c17] 17. The golf club head according to claim 16 wherein the crown portion, the sole portion, the ribbon portion and the return portion define a gap, the gap also defined by an exterior surface of the inward recessed portion, the gap having a distance from an edge of the return portion to an exposed edge of the aft-body ranging from 0.02 inch to 0.09 inch.

[c18] 18. The golf club head according to claim 16 wherein the rear weighting cavity is accessible from an exterior of the aft-body, and further comprising a skid plate covering the rear weighting cavity.